

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
**Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,035	12/20/2000	B. Arlen Young	ADPT1058	8135

7590 06/29/2004

Forrest Gunnison  
Gunnison, McKay & Hodgson, L.L.P.  
Garden West Office Plaza, Suite 220  
1900 Garden Road  
Monterey, CA 93940

EXAMINER

DANG, KHANH NMN

ART UNIT

PAPER NUMBER

2111

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/745,035

Applicant(s)

YOUNG, B. ARLEN

Examiner

Khanh Dang

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/8/2003 preliminary amendment.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20040403.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Frame et al. (cited by this Examiner in copending Application No. 09/745,034 and recited by Applicant in 3/4/2004 IDS).

At the outset, it is noted that similar claims will be grouped together to avoid repetition in explanation.

As broadly drafted, these claims do not define any structure/step that differs from Frame et al.

With regard to claim 1, Frame et al. discloses a method for flow control by a SCSI system using a Packetized SCSI Protocol, the method comprising:  
transferring a data packet information unit in a Packetized SCSI Protocol Data

Art Unit: 2111

Out phase between a SCSI initiator and a SCSI target over a SCSI bus (it is first noted that Frame et al. employs packetized SCSI and therefore, the system of Frame et al. must be fully in compliance with packetized SCSI protocol. At the outset, it is also noted that unlike SCSI, for data transfer, packetized SCSI involves only 2 phases. The Data In phase transfers a packet comprising a command (header) and data (payload) from the target to the initiator; and Data Out phase transfers command and data from the initiator to the target in the form of a packet containing a header and a payload. Further, a packet contains nexus information (for example, the unit number of the device for which the packet is intended and the type of packet or packets to immediately follow if there is one). A packet or information unit consists of a header and a payload transmitted in pairs, except when the header indicates there is no data (payload) to follow. In Frame et al., it is clear that in the Data Out phase, data the initiator delivers data to the target, see at least column 4, lines 33-36); and generating a signal on said SCSI bus by the SCSI target (in Frame et al., the target will reassert C/D (command/data) and I/O (input/output) during the REQ (request) and ACK (acknowledge) handshakes the Data Out phase, see at least column 4, lines 37-39) in the Packetized SCSI Protocol Data Out phase to indicate whether another data packet information unit is to be accepted (the REQ, when asserted low, this signal indicates a target's desire to begin a REQ/ACK handshakes for another data packet information unit, see at least column 3, line 30 to column 4, line 39) in the Packetized SCSI Protocol Data Out phase by the SCSI target. Since claim 1 is broadly drafted, the step of "generating a signal" is

Art Unit: 2111

also readable on the parity line signal of Frame. According to Frame, in order to check the integrity of the SCSI bus, the SCSI system uses byte parity for detecting data errors (column 2, lines 29-35; column 9, lines 9-32, and column 11, line 32 to column 12, line 3). The use of only a single error detecting mechanism presents problems for the proper validation of data. In another word, if no error conditions on the parity line occurred, more data can be accepted; and no more data can be accepted if error conditions occurred.

With regard to claims 2 and 3, According to Frame, in order to check the integrity of the SCSI bus, the SCSI system uses byte parity for detecting data errors (column 2, lines 29-35; column 9, lines 9-32, and column 11, line 32 to column 12, line 3). The use of only a single error detecting mechanism presents problems for the proper validation of data. In another word, if no error conditions on the parity line occurred, more data can be accepted; and no more data can be accepted if error conditions occurred.

With regard to claim 4, since claim 4 is broadly drafted, different interpretation can be assigned to claim 4. In Frame et al., the REQ pulse/signal generated by the target that reaches the maximum REQ pulses/signals indicates that the SCSI target will not accept another data packet information unit. See at least column 3, line 30 to column 4, line 2). In an alternative interpretation, according to Frame, in order to check the integrity of the SCSI bus, the SCSI system uses byte parity for detecting data errors (column 2, lines 29-35; column 9, lines 9-32, and column 11, line 32 to column 12, line 3). The use of only a single error detecting mechanism presents problems for the proper

Art Unit: 2111

validation of data. In another word, if no error conditions on the parity line occurred, more data can be accepted; and no more data can be accepted if error conditions occurred.

With regard to claims 5 and 7, Frame et al. discloses a method for flow control by a SCSI system using a Packetized SCSI Protocol, the method comprising: transmitting a data packet information unit or a plurality of data packet information units, one immediately after another, by a SCSI initiator in a Packetized SCSI Protocol Data Out phase (it is first noted that Frame et al. employs packetized SCSI and therefore, the system of Frame et al. must be fully in compliance with packetized SCSI protocol. At the outset, it is also noted that unlike SCSI, for data transfer, packetized SCSI involves only 2 phases. The Data In phase transfers a packet comprising a command (header) and data (payload) from the target to the initiator; and Data Out phase transfers command and data from the initiator to the target in the form of a packet containing a header and a payload. Further, a packet contains nexus information (for example, the unit number of the device for which the packet is intended and the type of packet or packets to immediately follow if there is one). A packet or information unit consists of a header and a payload transmitted in pairs, except when the header indicates there is no data (payload) to follow. In Frame et al., it is clear that in the Data Out phase, data the initiator delivers data to the target, see at least column 4, lines 33-36); and monitoring a signal level on a parity line of a SCSI bus to determine whether transmitting a plurality of data packet information units is to be terminated (according to Frame, in order to check the

Art Unit: 2111

integrity of the SCSI bus, the SCSI system uses byte parity for detecting data errors (column 2, lines 29-35; column 9, lines 9-32, and column 11, line 32 to column 12, line 3). The use of only a single error detecting mechanism presents problems for the proper validation of data. In another word, if no error conditions on the parity line occurred, more data can be accepted; and no more data can be accepted if error conditions occurred).

With regard to claim 6, it is clear that in order to do parity checking/determining/interpreting to verify data transfer, the parity line must be "asserted."

With regard to claim 8, it is clear that in order to do parity checking/determining/interpreting to verify data transfer, the parity line must be "asserted." See also discussion regarding to claims 5 and 7 above.

With regard to claim 9, see discussion above regarding to claims 5-8 above.

With regard to claim 10, see discussion regarding claims 5-9 above. Note that Fig. 1 shows generally a SCSI bus 9 and either one of the devices 1-4 can be an initiator or target depending on the transfer direction. Note also that it is clear that the initiator of Frame et al. must include a so-called "flow control module" to perform the steps of transmitting, receiving, and interpreting. See at least claim 92.



Art Unit: 2111

Claims 1 and 4 are rejected under 35 U.S.C. 102(a) as being anticipated by Qlogic Corp. (cited by this Examiner in copending Application No. 09/745,034 and recited by Applicant in 3/4/2004 IDS).

At the outset, it is noted that similar claims will be grouped together to avoid repetition.

As broadly drafted, these claims do not define any structure/step that differs from "The Next Steps in SCSI" by Qlogic Corp.

With regard to claims 1 and 4, Qlogic discloses a method for flow control by a SCSI system using a Packetized SCSI Protocol, the method comprising: transferring a data packet information unit in a Packetized SCSI Protocol Data Out phase between a SCSI initiator and a SCSI target over a SCSI bus (for data transfer, there are only 2 phases in Packetized SCSI (page 10, last paragraph). In particular, the Data In phase transfers a packet comprising a command (header) and data (payload) from the target to the initiator; and Data Out phase transfers command and data from the initiator to the target in the form of a packet containing a header and a payload); and generating a signal on said SCSI bus by the SCSI target in the Packetized SCSI Protocol Data Out phase to indicate whether another data packet information unit is to be accepted in the Packetized SCSI Protocol Data Out phase by the SCSI target (packetized SCSI Protocol supports a plurality of packets, one after another. A packet contains nexus information (for example, the unit number of the device for which the packet is intended and the type of packet or packets to immediately follow if there is one). A packet or information unit consists of a header and a payload transmitted in

Art Unit: 2111

pairs, except when the header indicates there is no data (payload) to follow. See pages 10-11. Further, in packetized SCSI protocol, when the target informs the initiator of a failure when it cannot accept or execute anymore data, all available information concerning the failure is automatically returned as part of the status information sent by the target. In another word, it is clear that indicating signal generated by the target in the form status information indicates whether more packet/data is to be accepted. See at least page 11, last paragraph.

Claims 1-10 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-9 of copending Application No. 09/745,034. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: transferring data unit(s) from an initiator to a target during a Data Out phase over a SCSI bus; and checking/interpreting a signal (on the parity line) of a SCSI bus to determine whether the target is able to accept more data units.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Art Unit: 2111

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The Information Disclosure Statement filed 7/7/2003 has not been considered because the pending US Applications are incorrectly listed under "US Patent Documents." The status of these US applications must be updated. If they become patents and have patent Nos. they should be listed under "US Patent" in the IDS.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



Khanh Dang  
Primary Examiner